

ARCHITECTURAL SLOT PLAQUE DIFFUSER

- PERIMETER SLOT
- PLAQUE CENTER
- ROUND NECK

Model:
66UNI Steel



Model 66UNI

The **Nailor Model Series 66UNI Plaque Diffuser with Perimeter Slots** has been specially designed to provide an unobtrusive appearance required for architectural excellence. A plaque face that sits flush in the center of the diffuser is surrounded by a choice of 1, 2 or 3 perimeter slots. This diffuser is designed specifically to integrate with 2' x 2' (610 x 610) ceiling module suspension systems.

The 66UNI provides a tight horizontal air pattern from maximum to minimum airflow and is ideal for VAV applications. The diffuser is provided with a deep plenum backpan to provide optimum performance by minimizing pressure drop and noise.

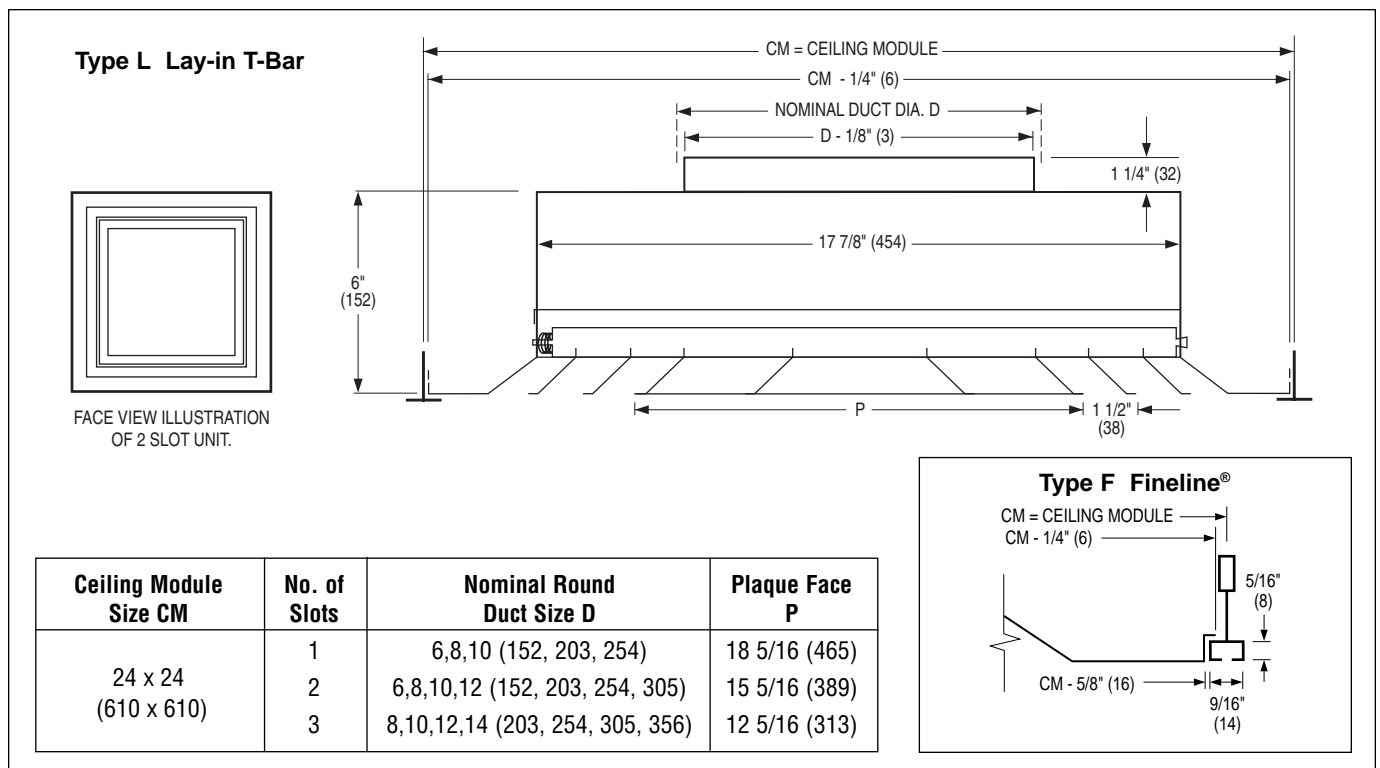
FEATURES:

- Clean lines with no unsightly visible screws.
- 24" x 24" (610 x 610) ceiling module size.
- Available with a choice of 1, 2, or 3 perimeter slots.
- Deep plenum backpan for premium performance.
- Spring loaded core. Removable without the use of tools.
- High neck collar for secure connection.

Material: Corrosion-resistant steel.

Finish: AW Appliance White baked enamel finish is standard. Other finishes are available.

D
CEILING DIFFUSERS



HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

Architectural Slot Plaque Diffusers – Model Series 66UNI

66UNI - 10 - 2 - 24 x 24 - L - AW - -

MODEL

- Steel Construction 66UNI

NECK SIZE (inches)

- 06, 08, 10, 12, 14

NO. OF SLOTS

- 1, 2, 3

CEILING MODULE SIZE

(inches) (mm)

- 24 x 24 (610 x 610)

FRAME/BORDER TYPE

- Lay-in T-Bar

L

- Finline®

F

ACCESSORIES

- None (default) —

- Earthquake Tabs EQT

AIR BALANCING DEVICES

- Radial Sliding Blade Damper 4250

- Radial Opposed Blade Damper 4275

- Butterfly Damper 4675

- Equalizing Grid EGR

- Damper/Equalizing Grid DEGR

FINISH

- Appliance White (default) AW

- Aluminum AL

- Special Custom Color SP

D

CEILING DIFFUSERS

Notes:

1. Consult text for availability of neck sizes with "No. of Slots" selection.

SUGGESTED SPECIFICATION:

Furnish and install **Nailor Model 66UNI Slot Plaque Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall be manufactured from corrosion-resistant steel and include a deep plenum backpan that has a round duct connection collar. The diffuser is to be sized to suit a 24" x 24" (610 x 610) ceiling suspension system. The center of the diffuser shall have a smooth flat plaque face in which 1, 2, or 3 (select one) perimeter slot(s) surround it. The core shall be spring loaded and removable without the use of tools. The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Performance Data

Model 66UNI • 24 x 24 (610 x 610) Ceiling Module

1 Slot

6" Dia. Neck	Airflow, cfm	79	99	118	138	158	177	197	236	276
	Neck Velocity, fpm	400	500	600	700	800	900	1000	1200	1400
	Total Pressure	0.021	0.033	0.048	0.066	0.086	0.108	0.133	0.192	0.261
	Static Pressure	0.011	0.017	0.026	0.035	0.046	0.058	0.071	0.102	0.139
	Throw	2-3-5	2-3-7	3-4-7	3-5-8	4-5-10	4-6-12	4-7-13	5-8-14	6-8-14
NC	—	—	17	21	25	8	31	35	40	
8" Dia. Neck	Airflow, cfm	140	166	192	218	244	270	297	323	349
	Neck Velocity, fpm	400	475	500	625	700	775	850	925	1000
	Total Pressure	0.026	0.036	0.048	0.063	0.079	0.097	0.117	0.139	0.162
	Static Pressure	0.016	0.022	0.029	0.039	0.048	0.060	0.072	0.086	0.100
	Throw	3-5-8	4-5-10	4-6-12	5-6-13	5-7-13	5-8-14	6-9-14	6-10-15	7-11-15
NC	—	18	22	25	28	31	33	36	38	
10" Dia. Neck	Airflow, cfm	109	150	191	232	273	313	354	395	456
	Neck Velocity, fpm	200	275	350	425	500	575	650	725	800
	Total Pressure	0.008	0.014	0.023	0.034	0.047	0.062	0.080	0.099	0.121
	Static Pressure	0.006	0.009	0.015	0.023	0.031	0.041	0.054	0.066	0.081
	Throw	2-4-6	3-5-9	4-5-12	5-7-13	5-8-14	6-10-14	7-11-15	8-12-16	9-13-17
NC	—	—	16	21	25	29	32	35	37	

2 Slot

6" Dia. Neck	Airflow, cfm	59	94	128	163	197	231	266	300	335
	Neck Velocity, fpm	300	475	650	825	100	1175	1350	1525	17000
	Total Pressure	0.010	0.024	0.045	0.072	0.105	0.146	0.193	0.246	0.305
	Static Pressure	0.004	0.010	0.019	0.030	0.043	0.060	0.079	0.101	0.125
	Throw	0-1-3	1-2-4	2-3-5	2-4-7	3-5-8	4-5-10	4-5-12	5-6-13	5-7-14
NC	—	—	—	17	22	26	30	33	36	
8" Dia. Neck	Airflow, cfm	140	192	244	297	349	401	454	506	558
	Neck Velocity, fpm	400	550	700	850	1000	1150	1300	1450	1600
	Total Pressure	0.021	0.039	0.063	0.092	0.128	0.169	0.217	0.269	0.328
	Static Pressure	0.011	0.020	0.032	0.047	0.066	0.087	0.112	0.138	0.168
	Throw	2-3-6	3-5-8	4-5-11	5-6-13	5-7-15	5-9-16	6-10-18	7-11-19	8-12-20
NC	—	—	20	25	29	33	36	39	42	
10" Dia. Neck	Airflow, cfm	218	273	327	382	436	491	545	600	654
	Neck Velocity, fpm	400	500	600	700	800	900	1000	1100	1200
	Total Pressure	0.024	0.037	0.053	0.073	0.095	0.121	0.149	0.18	0.214
	Static Pressure	0.014	0.021	0.031	0.042	0.055	0.071	0.087	0.105	0.124
	Throw	3-5-9	4-6-12	5-7-14	5-8-16	6-9-17	7-11-18	8-12-19	9-13-21	9-14-22
NC	—	16	21	25	29	32	35	37	40	
12" Dia. Neck	Airflow, cfm	236	314	393	471	550	628	707	785	864
	Neck Velocity, fpm	300	400	500	600	700	800	900	1000	1100
	Total Pressure	0.015	0.027	0.042	0.061	0.083	0.107	0.136	0.168	0.203
	Static Pressure	0.009	0.017	0.026	0.039	0.052	0.067	0.086	0.106	0.128
	Throw	4-5-10	5-7-14	5-8-16	7-10-18	8-12-20	9-14-21	10-15-22	12-16-23	13-17-24
NC	—	15	21	26	30	33	36	39	42	

Performance Notes:

1. All pressures are in inches w.g.
2. Throws are given at 150, 100 and 50 fpm terminal velocities, under isothermal conditions.
3. NC (Noise Criteria) values are based on 10 dB room absorption, re 10⁻¹² watts. Dash (-) in spaces indicates an NC level of less than 15.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

Balancing:

It is recommended that a commercially available 'Flow Hood' is used for field balancing. The airflow meter directly reads average flow rate with great accuracy at all volumes. It is a much faster and more accurate alternative to time consuming multiple velocity readings, eliminating the use of Ak factors and the calculations required to convert the average velocity into airflow.